

optical communication technique. Optionally, the radio communication and optical communication may be used in combination.

[0029] In this particular preferred embodiment, the optical communication is preferably carried out by an element that is provided on the substrate so as to propagate an optical signal vertically to the substrate.

[0030] In yet another preferred embodiment, the display device may have the ability to switch communications modes of transmitting or receiving the signal to/from the electronic appliance depending on whether the display device defines the attached state or the removed state with respect to the electronic appliance.

[0031] In this particular preferred embodiment, switching of the communication modes may include switching between an optical communication mode and a radio communication mode.

[0032] Alternatively, switching of the communication modes may include changing output levels of the signal to be exchanged.

[0033] In yet another preferred embodiment, the display device may have the ability to transmit a signal that controls some functions of the electronic appliance.

[0034] An electronic appliance according to another preferred embodiment of the present invention preferably includes: a member for receiving the display device according to any of the preferred embodiments described above in a removable state; and a transceiver to transmit or receive a signal to/from the display device.

[0035] In one preferred embodiment of the present invention, the electronic appliance may be a personal digital assistant.

[0036] In another preferred embodiment, the electronic appliance may be a display system.

[0037] A camera according to another preferred embodiment of the present invention preferably includes an imaging optical system, an image information generator, a first transceiver, a first system controller, a housing, and a card-type display device. The image information generator preferably generates image information based on optical information obtained from the imaging optical system. The first transceiver preferably generates and outputs a display signal in accordance with the image information that has been generated by the image information generator. The first system controller preferably controls the imaging optical system, the image information generator and the first transceiver. The housing is preferably used to store the imaging optical system, the image information generator, the first transceiver and the first system controller therein. The card-type display device is fitted into, but removable from, the housing. The card-type display device preferably includes: a display section; a second transceiver for transmitting or receiving a signal to/from the first transceiver; a driver for driving the display section in response to the display signal; and a second system controller for controlling the second transceiver and the driver.

[0038] In one preferred embodiment of the present invention, at least portion of the second transceiver and at least

portion of the second system controller are preferably integrated together with the display section and the driver on the same substrate.

[0039] In another preferred embodiment, the card-type display device is preferably fitted into the housing so as not to exceed the width of the housing.

[0040] In still another preferred embodiment, the card-type display device may further include a power supply and may have the ability to conduct a display operation by itself even when the display device is out of contact with the housing.

[0041] In this particular preferred embodiment, the power supply may be attachable to, and removable from, the display device.

[0042] Alternatively, the power supply may include a solar battery.

[0043] As another alternative, power may be supplied to the power supply of the card-type display device by electromagnetic induction while the display device is in contact with the housing.

[0044] In yet another preferred embodiment, the card-type display device may further include a memory.

[0045] In that case, the memory is preferably attachable to, and removable from, the card-type display device.

[0046] In yet another preferred embodiment, the card-type display device may further include an imager.

[0047] In yet another preferred embodiment, the card-type display device may further include an input circuit, which generates an instruction signal in response to user's operation.

[0048] In this particular preferred embodiment, the card-type display device preferably further includes an input section, through which a command is input by user's manipulation.

[0049] In a specific preferred embodiment, the input section is preferably provided either on a surface of the display device so as to face a screen of the display section or on a side surface of the display device so as to cross the screen.

[0050] In yet another preferred embodiment, the card-type display device may further include at least one circuit that is selected from the group consisting of a memory, an input circuit, and an imager. In that case, a portion of the at least one circuit is preferably integrated together with the other circuits on the substrate.

[0051] In yet another preferred embodiment, the at least portion of the second transceiver and the at least portion of the second system controller preferably each include a circuit component that is made of the same film as a circuit component of the display section or the driver.

[0052] In a specific preferred embodiment, the same film is preferably a continuous grain silicon film.

[0053] In yet another preferred embodiment, while fitted in the housing, the card-type display device preferably transmits or receives the signal to/from the first transceiver by a non-contact method.